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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,521	06/06/2001	James W. O'Toole JR.	CIS00-3139	6938

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EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,521

Applicant(s)

O'TOOLE, JAMES W.

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the Amendment filed on 9/22/05. Applicant's arguments have been fully considered but are not found to be persuasive.
2. Claims 1-32 are presented for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-6, 13-16, 19, 21-24, 27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogasawara et al. (hereinafter Ogasawara) (US 6,070,052).**

4. As to claim 1, Ogasawara teaches a method in a data communications device for directing a request to process data (network communication system) (*col. 1, lines 10-13*), comprising the steps of:

receiving the request from a client (*col. 3, lines 14-17*);

generating an estimated response usage for each resource of a plurality of resources that reflects a potential usage if responding to the request, said estimated response usage including a cost estimate for processing the request (expected utility function, utility function, future utility function) (*col. 2, lines 12-58*);

selecting a resource from said plurality of resources to process the request based on said estimated response usage (*col. 2, lines 19-36*); and

forwarding the data to the one of the plurality of resources selected in the step of selecting (*col. 2, lines 59-67*).

5. As to claim 2, Ogasawara teaches wherein the step of selecting the one of the plurality of resources comprises:

generating an estimated available usage for each resource based on the request and usage information received from a usage meter for each resource (expected utility function, utility function, future utility function) (*col. 2, lines 12-58*); and

selecting the resources based on a highest estimated available usage for each resource (*col. 2, lines 19-36*).

6. As to claim 3, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Ogasawara teaches a memory that stores a cost modeler and it is inherent that there is a program/application to implement this within the data communications system; an interconnection mechanism (*col. 5, lines 25-40*); and it is inherent that there is a processor (that performs the utility function calculations) coupled to the memory by the interconnection mechanism, wherein the processor operates in accordance with instructions of the cost modeler application stored in the memory to direct the request.

7. As to claim 4, it is rejected for the same reasons as stated in the rejection of claim 2.

8. As to claim 5, it is rejected for the same reasons as stated in the rejection of claim 1.

9. As to claim 6, it is rejected for the same reasons as stated in the rejection of claim 1.

10. As to claim 13, it is rejected for the same reasons as stated in the rejection of claim 1.

11. As to claim 14, Ogasawara teaches receiving usage information from a usage meter for each resource that measures the amount of usage of each resource over time; generating an estimated base usage of each resource based on the usage information; and generating a peak usage metric (maximum expected utility) for each resource that represents a measurement of the highest level of usage attained for each resource over a current billing period based on the usage information (*col. 2, lines 19-58*).

12. As to claim 15, Ogasawara teaches wherein the step of generating the economic metric comprises the steps of generating an estimated request usage for each resource that reflects an estimate of the projected usage of each resource over a current time based on the request for data; and generating an estimated available usage for each resource based on the usage metric for each resource and the estimated request usage for each resource (*col. 2, lines 19-58*).

13. As to claim 16, it is rejected for the same reasons as stated in the rejection of claim 2. In addition, Ogasawara teaches generating a peak usage metric (maximum expected utility) for each

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resource that represents a measurement of the highest level of usage attained for each resource over a current billing period based on the usage information (*col. 2, lines 19-58*).

14. As to claim 19, Ogasawara teaches wherein the step of generating the economic metric comprises generating the economic metric based on a category that indicates an estimated request usage for each resource (*col. 2, lines 19-58*).

15. As to claim 21, it is rejected for the same reasons as stated in the rejection of claim 3.

16. As to claims 22-24, it is rejected for the same reasons as stated in the rejection of claims 14-16.

17. As to claim 27, it is rejected for the same reasons as stated in the rejection of claim 19.

18. As to claim 29, it is rejected for the same reasons as stated in the rejection of claim 13.

19. As to claim 30, it is rejected for the same reasons as stated in the rejection of claim 13.

20. As to claims 31-32, they are rejected for the same reasons as stated in the rejections of claims 14-20.

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21. Claims 7-12, 17-18, 20, 25-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara et al. (hereinafter Ogasawara) (US 6,070,052).

22. As to claim 7, it is rejected for similar reasons as the rejection of claim 1. In addition, it is inherent that responding to a request will increase the cost of a resource. However, Ogasawara fails to explicitly teach comparing and selecting the resource with the lower cost increment.

"Official Notice" is taken that both the concept and advantages of providing that comparing and selecting the resource with the lower cost increment is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include comparing and selecting the resource with the lower cost increment to the existing system of Ogasawara because it would reduce costs, which would therefore, maximize the utilization function of Ogasawara.

23. As to claim 8, Ogasawara teaches wherein the step of comparing the first cost increase and the second cost increase comprises determining that the first cost increase exceeds a first preset cost level and the second cost increase does not exceed a second preset cost level (move from one resource to a different one) (*col. 1, lines 25-64*).

24. As to claim 9, it is rejected for similar reasons as the rejection of claim 3. In addition, it is inherent that responding to a request will increase the cost of a resource. However, Ogasawara fails to explicitly teach comparing and selecting the resource with the lower cost increment.

"Official Notice" is taken that both the concept and advantages of providing that comparing and

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selecting the resource with the lower cost increment is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include comparing and selecting the resource with the lower cost increment to the existing system of Ogasawara because it would reduce costs, which would therefore, maximize the utilization function of Ogasawara.

25. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 8.

26. As to claim 11, it is rejected for the same reasons as stated in the rejection of claim 7.

27. As to claim 12, it is rejected for the same reasons as stated in the rejection of claim 7.

28. As to claim 17, it is rejected for the same reasons as stated in the rejection of claim 7.

29. As to claim 18, Ogasawara teaches wherein the step of generating the economic metric comprises generating a bandwidth metric that represents the bandwidth requirements for each resource (*col. 2, lines 12-18*). Ogasawara fails to explicitly teach that the network address of the client is provided because it would have been obvious to one of ordinary skill in the art at the time the invention was made that a network address of the client is provided because without it, data could not be transferred through the network.

30. As to claim 20, it is rejected for the same reasons as stated in the rejection of claim 7.

31. As to claims 25-26, they are rejected for the same reasons as stated in the rejection of claims 17-18.

32. As to claim 28, it is rejected for the same reasons as stated in the rejection of claim 20.

Response to Arguments

33. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

34. *Applicant argues that the features in the Specification, page 2, lines 9-24 are not well known in the art.*

In response, these limitations are not claimed. In addition, page 2, lines 9-24 does not teach anything about increments.

35. *Applicant (on pages 16-17) argues that steps of generating a cost estimate for processing a request in a data communication device for directing a request to process data is not well known in the art and requests a reference showing this.*

In response to this request, Page (US 3,702,006) teaches a method for balancing the utilization of input/output devices based on cost and that the best choice is the one with the smallest utilization (*col. 15, lines 65-68 through col. 16, lines 1-15, and Abstract*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Page with Ogasawara because it would be advantageous to be able to select the “best” resource (*col. 15, lines 65-68 through col. 16, lines 1-15, and Abstract*).

36. *Applicant argues on page 17 that Ogasawara does not teach generating an economic metric.*

In response, the Examiner respectfully disagrees. The amount of usage in Ogasawara is a metric of cost. This satisfies the broadest reasonable interpretation and the Specification does not contradict this.

37. *Applicant argues on page 17 of the Remarks that using a cost increase in selecting a resource to process a request from a client is not well known in the art and the Applicant requests the Examiner to supply a reference.*

In response to this request, Page (US 3,702,006) teaches a method for balancing the utilization of input/output devices based on utilization (cost) increment and that the best choice is the one with the smallest utilization (*col. 15, lines 65-68 through col. 16, lines 1-15, and Abstract*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Page with Ogasawara because it would be advantageous to be able to select the “best” resource (*col. 15, lines 65-68 through col. 16, lines 1-15, and Abstract*).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
9/28/05


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